

REMARKS

Claims 15-19 are pending for examination on the merits, claims 1-14 having been previously withdrawn pursuant to a restriction requirement. Claim 15 has been amended. No new matter has been added.

Reconsideration is requested in view of the following remarks.

Rejection of Claims 15-19 under 35 U.S.C. § 103

Claims 15-19 stand rejected under 35 U.S.C. § 103(a) as obvious over, WO 02/46719 (corresponding to US 2004/0065093) to Fuhr, et al. ("Fuhr") in view of US 5,415,282 to Kienholz ("Kienholz"). Applicants respectfully traverse the rejection of claims 15-19.

Claim 15 has been amended to specifically recite that the at least one specimen chamber has a "wall having a thickness," and that at least one of a side face of the first frame part and a side face of the second frame part has "receptacle elements formed thereon for accommodating at least a portion of the wall thickness of the specimen chamber."

Accordingly, claim 15 further recites that "the specimen chamber [is] accommodated in the receptacle elements" and the first and second frame parts are clamped together "to pinch off the specimen chamber between the side faces of the first and second frame parts." Support for the amendments can be found in the original specification at least at paragraph 0010, 0026, and 0028, and in Figs. 1, 2(a), 2(b), 3(a), 3(b), 3(c), 3(d), and 3(e).

In making a case for obviousness, the Examiner must: (1) determine the scope and content of the prior art; (2) ascertain the differences between the prior art and the claims at issue; (3) resolve the level of ordinary skill in the pertinent art; and (4) evaluate evidence of secondary considerations. *Graham v. John Deere*, 383 U.S. 1 (1960); *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727 (2007). When applying 35 U.S.C. § 103, the following tenets of patent law must be followed: (1) the claimed invention must be considered as a whole; (2) the references must be considered as a whole; (3) the references must be viewed without the benefit of impermissible hindsight afforded by the claimed invention; and (4) the standard for determining obviousness is a reasonable expectation of success. MPEP § 2141.

Neither Fuhr nor Kienholz discloses, teaches, or suggests positioning a specimen chamber in a mounting frame as recited in claim 15, the mounting frame having a first frame

part with a side face and a second frame part with a side face opposite the side face of the first frame, at least one of the side faces including receptacle elements formed thereon for accommodating at least a portion of the wall thickness of the specimen chamber. In particular, Fuhr does not teach receptacle elements on at least one side face of first and second frame parts, for at least the reason that Fuhr does not even disclose first and second frame parts but rather discloses a single-part frame into which specimen chambers are integrally mounted. Further, Kienholz is silent with regard to receptacle elements on at least one side face of first and second frame parts, and instead teaches a transfer bag (not a specimen chamber) passing between the edges of two parts of a container.

As a basic matter, as Applicants have pointed out in previous responses, the Examiner incorrectly asserts that Fuhr teaches a carrier having “first and second frame part[s], which are adapted for assembling together, [and] connecting the first and second frame parts into an assembled state wherein the first and second parts come into contact on side faces with the specimen chamber.” Office action at page 4, paragraph 6. The Examiner provides no citation for this assertion, but later relies on the embodiments disclosed in Fuhr Figs. 17 and 18, which, contrary to the Examiner’s contention, disclose a carrier made from a single plastic injection-molded part 627 into which a specimen chamber is integrally supported. See Fuhr at paragraph 0078 (“The specimen carrier 621 is attached to the top side of the encapsulation 626 or as part of the encapsulation. The specimen carrier 621 comprises a plastic frame 627, in which for receiving specimens, at least one cryo-container 615 is integrated.”) and paragraph 0083 (“With the embodiment according to Fig. 8, for example, for example, five cryo-containers 615 are integrated in the encapsulation 626 (enclosed). This can take place by injection of the cryo-container 615 into the encapsulation material or an adhesive bonding.”). Therefore, Fuhr does not teach or suggest, and actually teaches away from, a carrier having first and second frame parts that are clamped together about a specimen chamber. To the contrary, Fuhr teaches a conventional single-piece plastic frame having openings through which tube-spaced specimen chambers extend.

Indeed, the Examiner’s rejection appears to be based on claim language that has long since been amended, as the Examiner continues to argue that Fuhr discloses “the closure of the tubes by clamping adjacent to the mounting frame.” Office Action at page 6, paragraph

8. Applicants respectfully remind the Examiner that claim 15 currently recites “wherein the specimen chamber is securely clamped by the first and second frame parts” and has been amended to further specify that the frame parts “pinch off the specimen chamber between the side faces of the first and second frame parts.” As such, the rejection does not meet the language of the claims.

Kiehholz does not remedy the deficiencies of Fuhr, so that even if the reference were to be combined, the claimed invention would not result. In particular, the Examiner continues to incorrectly contend that the bag 12 of Kienholz is a specimen chamber. It is not. Rather, the tubes 14 of Kienholz are specimen chambers, each containing a specimen, and the bag 12 is merely used to transfer the specimen tubes 14 from a storage container 10 to a freezer. See Kienholz at col. 4, lines 24-54 (explaining that the bag 12 holding the specimen tubes 14 can be temporarily kept cool in the container 10, which is essentially an insulated box, until a courier can arrive to transfer the bag 12 containing the tubes 14 into a freezer in the courier’s van). No person of ordinary skill in the art would consider Kienholz’s bag 12 to be a specimen chamber – the bag 12 does not accommodate specimens but rather holds multiple specimen tubes 14 which do accommodate specimens.

Moreover, in the claimed method, the first and second frame parts “pinch off the specimen chamber between side faces” thereof. Neither Fuhr nor Kienholz teaches or suggests this feature. As discussed above, and as admitted by the Examiner, Fuhr merely allows the specimen chamber to be held within a single-piece frame such that the sample chambers can be clamped off external to and separately from the frame after use. See Fuhr at Figs. 23 and 24, and paragraph 0092. Additionally, the specimen tubes 14 of Kienholz are already sealed before they are placed into the transfer bag 12, and Kienholz merely contacts the transfer bag 12, and not the specimen tubes 14, between parts of the container 10.

The Examiner argues that “[s]ince Kienholz teaches that the clamping mechanism could be integrated into frames in methods for the encapsulation of biological specimens, one of ordinary skill in the art would have recognized that, after the filling of the tubes, a frame element could have been placed over the assembly to clamp the tubes rather than individually clamping each of the specimen chambers.” Office Action at page 7, paragraph 10.

Applicants respectfully submit that this argument is not grounded in the reference or in the

language of the claims. First, the claims do not recite a “clamping mechanism” or methods using such a clamping mechanism for “encapsulation of biological samples,” so whether or not Kienholz teaches those features (which it does not) is irrelevant. Second, the Examiner appears to contend that “the tubes” of Kienholz are somehow different from individual “specimen chambers,” when in fact Kienholz tubes 14 are themselves the specimen chambers that are individually closed off prior to placement in the container 10 and thus do not need to be pinched off by parts of the frame in which the specimen tubes 14 are mounted.

The Examiner then argues that “[o]ne would further have recognized that this would have been desirable because it eliminates the additional step of clamping individual specimen chambers.” Office Action at page 7, paragraph 10. Applicants respectfully point out that a skilled artisan would have gleaned nothing regarding the claimed invention from the features of Kienholz cited by the Examiner. In particular, regardless whether the specimen tubes 14 of Kienholz are placed into a transfer bag 12, the specimen tubes 14 themselves are individually sealed prior to being placed into the container 10, and it is clear that more than one specimen tube 14 can be accommodated in the container 10 even without the presence of the transfer bag 12. Therefore, whatever alleged “clamping” of the bag 12 occurs in Kienholz has no bearing on the specimen tubes 14, which are neither “clamped by” nor “pinched off” by first and second parts of the container 10.

In sum, both Fuhr and Kienholz, alone and in combination with each other, fail to teach several aspects of the claimed invention. Specifically, neither reference teaches or suggests: (a) at least one of the side faces of the first and second frame parts having receptacle elements formed thereon for accommodating at least a portion of the wall thickness of the specimen chamber, the specimen chamber being accommodated in the receptacle elements or (b) the specimen chamber being securely clamped by the first and second frame parts to pinch off the specimen chamber between the side faces of the first and second frame parts.

Therefore, claim 15 is nonobvious over Fuhr in view of Kienholz. Claims 16-19 depend from claim 15, and without prejudice to their individual merits, are nonobvious for at least the same reasons as claim 15. Accordingly, Applicants respectfully request that the rejections be withdrawn.

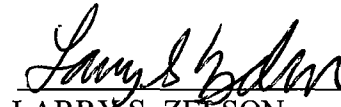
Conclusion

In view of the foregoing, the application is believed to be in condition for allowance. Withdrawal of all rejections, and an early notice of allowance of claims 15-19, are earnestly solicited.

Respectfully submitted,

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